

**CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE
2002 ANNUAL REPORT**

This report is prepared in compliance with Article V of the Bylaws of the California Traffic Control Devices Committee (CTCDC).

2002 VOTING MEMBERS

Mr. Jim Larsen CSAC	Chairman, CTCDC Associate Director, Tulare County Resource Mgmt. Agency 908 S. Giddings Street Visalia, CA 93277
Mr. John Fisher LOCC	Vice Chairman, CTCDC Assistant General Manager City of Los Angeles DOT 221 N. Figueroa Street, Suite 500 Los Angeles, CA 90012
Mr. Ray Mellen ACSC (Resigned Aug/02)	Auto Club of Southern California 3333 Fairview Road, A131 Costa Mesa, CA 92626
Mr. Richard Backus ACSC (Replaced Mr. Mellen)	Auto Club of Southern California 3333 Fairview Road, A131, Costa Mesa, CA 92626
Ms. Merry Banks CSAA	Manager, Traffic Safety Department California State Automobile Association 150 Van Ness Avenue, MS A03C San Francisco, CA 94102-1860
Mr. Gerry Meis CALTRANS	California Department of Transportation 1120 N Street Sacramento, CA 95814
Mr. Farhad Mansourian CSAC	Chief Asst. Director Department of Public Works, Marin County P.O. Box 4186 San Rafael, CA 94913
Capt. Ike Iketani CHP (Resigned Aug/02)	California Highway Patrol 2555 First Avenue Sacramento, CA 95818
Capt. Sal Segura CHP (Replaced Mr. Iketani)	California Highway Patrol 2555 First Avenue Sacramento, CA 95818

Mr. Wayne Tanda
LOCC
(Resigned on 2/02)

Director of Transportation
City of San Jose
4 North Second Street, Suite 1000
San Jose, CA 95113

Mr. Ed Von Borstel
LOCC
(Replaced Mr. Tanda)

Deputy Director Public Works & Transportation
City of Modesto
1010 Tenth Street, Modesto, CA 95353

The following alternate members were designated by the parent organizations to act in the absence of their appointed voting members:

2001 ALTERNATE MEMBERS

Mr. Richard Backus
ACSC

Auto Club of Southern California
3333 Fairview Road, A131, Costa Mesa, CA 92626

Mr. Dwight Ku
CSAA

California State Automobile Association
100 Van Ness Ave, 16th Floor
San Francisco, CA 94102

Mr. Jacob Babico
CSAC

Chief Traffic Division
San Bernardino County
825 E. Third Street, San Bernardino, CA 92412

Mr. Mark Greenwood
LOCC

Engineering Manager
City of Palm Desert
73-510 Fred Waring Dr., Palm Desert, CA 92260

Mr. John Presleigh
CSAC

Assistant Director Transportation Division
Santa Cruz County DPW
701 Ocean street, Room 410, Santa Cruz, Ca 95060

Mr. Devinder Singh
CALTRANS

California Department of Transportation
1120 N Street
Sacramento, CA 95814

Lt. Julie Page
CHP

California Highway Patrol
2555 First Avenue
Sacramento, CA 95818

Mr. Ed Von Borstel
LOCC

Deputy Director Public Works & Transportation
City of Modesto
1010 Tenth Street, Modesto, CA 95353

Mr. Gian Aggarval
LOCC

Deputy Director Public Works
City of Vacaville
650 Merchant St.
Vacaville, CA 95688

SECRETARY

Mr. Devinder Singh

California Department of Transportation
1120 N Street, MS36, Sacramento, CA 95814**2002 MEETINGS****Date****Location**

January 31, 2002 Caltrans District 8, 464 W. Fourth Street, San Bernardino, CA 92402.

May 8, 2002 Caltrans Headquarters, 1727 30th Street, Sacramento, CA 95816.

August 22, 2002 Caltrans District 11, 4120A Taylor Street, San Diego, CA 92186.

December 5, 2002 Caltrans District 4, 111 Grand Avenue, Oakland, CA 94623

2002 CTCDC AGENDA ITEMS

<u>Agenda Item No.</u>	<u>Title</u>
98-18	Ground Mounted Led Lights on Stop Bars
99-11	MUTCD Adoption by Caltrans
00-3	Engine Brake Sign
00-4	Use of Raised Pavement Markers in a Transverse Pattern
00-6	Pedestrian Countdown Signal Head
00-8	Pedestrian Countdown Signal Head
00-1	Bicycle Pavement Markings
01-3	Pedestrian Countdown Signal Head
01-5	Accessible Pedestrian Signal
01-11	Temporary or Portable Speed Display Sign
01-12	BlinkerStop Sign
02-1	Pedestrian Signals
02-2	Pedestrian Countdown Signal Head
02-3	Right Edge Line
02-4	Pedestrian Countdown Signal Head
02-5	Establishment of Speed Limit Zones Based on the Engineering and Traffic Survey
02-6	Affect of ADA Requirements on Traffic Control Devices
02-7	Push Button For Pedestrian Warning Lights, Cross With Caution (R62E) Sign
02-8	Fines Higher Sign (Red Light Violation Sign)
02-9	Mandatory Requirement of Accessible Pedestrian Signals
02-10	Pedestrian Countdown Signal Head
02-11	Speed Feedback (Radar Speed) Sign
02-12	When Children are Present (R72) Sign
02-13	Proposed Changes to Chapter 9 – Traffic Signals and Lighting (Traffic Manual)
02-14	Speed Feedback (Radar Speed) Sign
02-15	Radar Guided Dynamic Curve Warning System
02-16	Traffic Signal Warrants 1 & 2

INFORMATION ITEMS:

- 99-11 MUTCD Adoption by Caltrans
- 00-1 Bicycle Pavement Marking
- 01-11 Temporary or Portable Speed Display Sign
- 02-13 Proposed Changes to Chapter 9 – Traffic Signals and Lighting (Traffic Manual)
- 02-9 Mandatory Requirement of Accessible Pedestrian Signals

DISCUSSION ITEMS:

- 02-5 Establishment of Speed Limit Zones Based on the Engineering and Traffic Survey
- 02-6 Affect of ADA Requirements on Traffic Control Devices
- 02-12 When Children are Present (R72) Sign
- 02-16 Traffic Signal Warrants 1 & 2

COMMITTEE ACCOMPLISHMENTS**00-4 Use of Raised Pavement Markers in a Transverse Pattern**

The Committee recommended that the following paragraph be added in to the Traffic Manual under Section 6-01.3:

“Raised pavement markers may be used to supplement transverse or longitudinal pavement markings (for right edge line, see Section 6-02.4). RPMs shall not be placed either on or within the marked crosswalk.”

00-6 Pedestrian Countdown Signal Head

The Committee authorizes the City of San Francisco to expand experimentation citywide with pedestrian countdown signal heads.

00-8 Pedestrian Countdown Signal Head

The Committee accepted the final report submitted on pedestrian countdown signal heads by the City of San Jose and allows the City to continue the use of the devices, until the Committee makes final decision on this device.

01-3 Pedestrian Countdown Signal Head

The Committee accepted the final report submitted on pedestrian countdown signal heads by the City of Fountain Valley and authorizes the city to expand the experimentation with pedestrian countdown signal heads.

02-4 Accessible Pedestrian Signals

The Committee recommended Caltrans adopt the MUTCD 2000 accessible pedestrian signals verbiage into the State Traffic Manual.

02-4 Pedestrian Signals (Section 9-03.20)

Caltrans proposed to amend Section 9-03.20 of the Traffic Manual by adding the text at the beginning, as follow:

“Where pedestrian movements regularly occur or are anticipated within 5 years of signal installation”, sSignal design must provide for or prohibit pedestrian movements.

Caltrans justification was that the current practice to include pedestrian provisions at signalized intersections is based on two factors. One, the actual pedestrian traffic counts, and second, on-site survey observing pedestrian movement or the anticipation of future pedestrians. If there is no pedestrian activity, then based on the current policy, the designer must install a sign to prohibit pedestrians from crossings, and sign would be maintained all the times. The loss, misplacement or vandalism of the sign could create liability problems. Another major drawback is wastage of the resources in the essence that the system is not being used. The proposed amendment would be applicable when there is no pedestrian activity at present and not expected in the future. There would be a few locations, which would benefit from the proposed amendment.

The Committee did not agreed with Caltrans proposal because it puts a burden on engineers to predict future pedestrian traffic, which is not a simple task. The Committee believe that it is the responsibility of an agency, that they must do one or the other, and maintains those devices. The Committee noted that the existing verbiage is enough to guide engineers to provide pedestrian clearance time or pedestrian signal heads or sign to prohibit pedestrian crossings.

02-4 Pedestrian Countdown Signal Heads

The Committee approved experimentation with pedestrian countdown signal heads as requested by the City of Berkeley.

02-4 Right Edge Line (Section 6-2.04)

The Committee recommended that the following paragraph be added in to the Traffic Manual under Section 6-2.04, Right Edge Line:

“ In general, raised pavement markers should not be used to supplement the right edge line. The use of raised pavement markers on the right edge line may lead the motorists to believe there is another lane to the right of the markers. If either retroreflective or non-reteroreflective raised pavement markers are used on a right edge line, an engineering study should be conducted documenting the reasons for their use and the marking should be consistent with the guidelines contained in the Traffic Manual.”

02-4 Pedestrian Countdown Signal Heads

The Committee approved experimentation with “pedestrian countdown signal heads” as requested by the County of San Luis Obispo.

02-7 Push Button for Pedestrian Warning Lights, Cross With Caution (R62E0 Sign.

The Committee recommended Caltrans adopt the sign, “Push Button For Pedestrian Warning Lights, Two way Arrow, Cross With Caution.”

Policy: R62E – The Push Button For Pedestrian Warning Lights/Cross With Caution sign (R62E0 shall be mounted immediately above or incorporated in the pedestrian push button unit where In Roadway Warning Lights are installed

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

MUTCD NUMBER None CODE R62E

NOTES:

1. For arrowhead dimensions, see Appendix Page 2 of 11.
2. Braille Message "PUSH BUTTON FOR PEDESTRIAN WARNING LIGHTS CROSS WITH CAUTION".

SIGN SIZE (Inches)	DIMENSIONS (Inches)											
	A	B	C	D	E	F	G	H	J	K	L	L
5 x 7-1/2	5	7-1/2	1/2	1/2C	3/8	5/8	1/2B	3/8	2-1/8	1/4	3-1/2	3/4
5 x 7-3/4	5	7-3/4	5/8	1/2C	3/8	5/8	1/2B	3/8	2-1/8	1/4	3-1/2	3/4
9 x 12	9	12	1	3/4C	1/2	1	3/4B	5/8	3-3/8	3/8	6	1

SIGN SIZE (mm)	DIMENSIONS (Millimeters)											
	A	B	C	D	E	F	G	H	J	K	L	L
127 x 191	127	191	13	13C	10	16	13B	10	54	6	89	19
127 x 197	127	197	16	13C	10	16	13B	10	54	6	89	19
229 x 305	229	305	25	19C	13	25	19B	16	86	10	152	25

COLORS
BORDER & LEGEND - BLACK (NON-REFLECTIVE)
BACKGROUND - YELLOW (REFLECTIVE)

- THE POLICY FOR INTENDED USAGE OF THIS SIGN IS SHOWN ON REVERSE SIDE -

CHIEF, OFFICE OF SIGNS AND DELINEATION

 3/3/03
 DATE

 REVISION

 REVISION

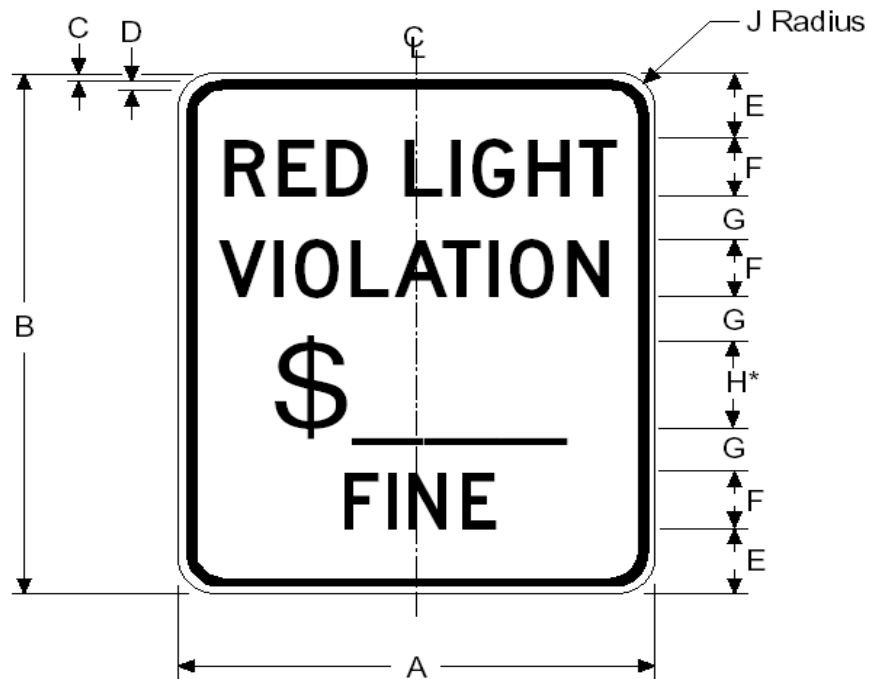
02-8 Fines Higher (Red Light Violation) Sign

The Committee recommended Caltrans adopt the following policy and sign specifications:

POLICY: SR58

The RED LIGHT VIOLATION \$_____ FINE sign (SR58) may be used in advance of signalized intersections where a local agency has adopted an ordinance setting a specific fine amount for red light violations within it's jurisdiction. This sign may be placed on State highways when requested by the local agency.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
MUTCD NUMBER None CODE SR58



*NOTE: Variable fine amount, specify when ordering.

SIGN SIZE (Inches)	DIMENSIONS (Inches)								
	A	B	C	D	E	F	G	H	J
30 x 36	30	36	1/2	3/4	4-1/2	4D	3	6D	1-7/8
36 x 48	36	48	5/8	7/8	6-1/2	5D	4	8D	2-1/4

SIGN SIZE (mm)	DIMENSIONS (Millimeters)								
	A	B	C	D	E	F	G	H	J
762 x 914	762	914	13	19	118	100D	76	150D	48
914 x 1219	914	1219	16	22	169	125D	102	200D	57

COLORS
BORDER & LEGEND - BLACK (Non-Reflective)
BACKGROUND - WHITE (Reflective)

- THE POLICY FOR INTENDED USAGE OF THIS SIGN IS SHOWN ON REVERSE SIDE -

George W. Reis
CHIEF, OFFICE OF SIGNS AND DELINEATION

2/19/03
DATE

REVISION

REVISION

02-9 Mandatory requirement of Accessible Pedestrian Signals

The Committee formed a Sub Committee by including members from the CTCDC and representatives from the blind community to develop guidelines to prioritize the installation of “Accessible Pedestrian Signals.”

02-11 Speed Feedback (Radar Speed) Sign

The Committee authorized experimentation with “Speed-Feedback” signs at five locations as requested by the City of Garden Grove

02-12 When Children are Present (R72) Sign **The Committee** in their collective judgement suggested that the current sign is working fine, except one incident and suggested not changing the current sign.**02-13 Proposed Changes to Chapter 9 – Traffic Signals & lighting**

The Committee reviewed Chapter 9 of the Traffic Manual during the process of developing California Supplement of the MUTCD and recommended minor editorial changes, which were incorporated by Caltrans.

02-14 Speed Feedback (Radar Speed) Sign

The Committee authorized experimentation with “Speed-Feedback” signs at four locations as requested by the County of Mendocino.

02-15 Radar guided Dynamic Curve Warning System

The Committee authorized experimentation with the “Radar Speed Dynamic Curve Warning System” as requested by the Caltrans District 5 Office.

SUMMARY OF ACCOMPLISHMENTS 2002

- 1 items carried over from 1998, final report on the experiment.
- 1 items carried over from 1999
- 5 item carried over from 2000
- 4 item carried over from 2001
- 27 items considered in 2002
- 16 items introduced in 2002
- 21 item completed in 2002
- 6 items not completed in 2001

ITEMS CARRIED INTO FUTURE YEAR

- 98-18 Ground Mounted LED Lights on Stop Bar
- 99-11 MUTCD Adoption by Caltrans
- 00-3 Engine Brake Sign
- 01-11 Temporary or Portable Speed Display Sign
- 02-9 Mandatory Requirement of Accessible Pedestrian Signals
- 02-10 Pedestrian Countdown Signal Heads

ITEMS APPROVED FOR EXPERIMENTATION

- 99-10 TACTILE PEDESTRIAN INDICATORS
(Experiment Agency-City of Los Angeles)
- 99-12 SPEED STRIPING FOR SMART CROSSWALKS
(Experiment Agency-Caltrans D7)
- 99-13 ILLUMINATED PAVEMENT MARKERS ON
MEDIAN BARRIERS (Experiment Agency-Caltrans D7)
- 00-1 BICYCLE PAVEMENT MARKING
(Experiment Agency-City of San Francisco)
- 00-5 USE OF LED PAVEMENT MARKERS AS A LEFT TURN GUIDANCE DEVICE
(Experiment Agency-City of Stockton and Caltrans D10)
- 00-6 PEDESTRIAN COUNTDOWN SIGNAL HEADS
(Experiment Agency-City of San Francisco)
- 00-9 PEDESTRIAN COUNTDOWN SIGNAL HEAD
(Experiment Agency-City of Stockton)
- 01-3 PEDESTRIAN COUNTDOWN SIGNAL HEAD
(Experiment Agency-City of Fountain Valley)
- 01-4 TACTILE PEDESTRIAN INDICATOR WITH AUDIABLE INFORMATION
(Experiment Agency-The City of Santa Cruz)
- 01-7 PEDESTRIAN COUNTDOWN SIGNAL HEAD
(Experiment Agency-The City of Oakland)
- 01-9 IN-ROADWAY WARNING LIGHTS AT R/R CROSSINGS
(Experiment Agency-California Public Utilities Commission)
- 01-12 BLINKERSTOP SIGN
(Experiment Agency-Caltrans, Tulare Co., Marin Co.)
- 02-2 PEDESTRIAN COUNTDOWN SIGNAL HEAD
(Experiment Agency-City of Berkeley)
- 02-4 PEDESTRIAN COUNTDOWN SIGNAL HEADS
(Experiment Agency-County of San Luis Obispo)
- 02-11 Speed Feedback (Radar Speed) Sign
(Experimentation Agency-City of Garden Grove)
- 02-14 Speed Feedback (Radar Speed) Sign
(Experimentation Agency-County of Mendocino)

- 02-15 Radar Guided Dynamic Curve Warning System
(Experimentation Agency–Caltrans D5)

STATUS OF CALTRANS ACTION ON PAST ITEMS

- 90-7 BICYCLE SIGNAL HEADS (BSH)
The Traffic Manual has been changed to reflect the BSH warrants under Section 9-01.5 of Chapter 9, Traffic signal and Lighting.
- 93-18 CROSSWALKS, SEQUENTIAL LIGHTING (In-Roadway Warning Lights (IRWL) at Crosswalks
Caltrans is developing Standard Special Provisions (SSP) for the IRWLs
- 99-3 AUDIBLE PEDESTRIAN SIGNAL POLICY
Caltrans will work with the CTCDC, the California Council of the Blind (CCB) and with individuals who are interested in this item to resolve along with the Agenda Item 01-5, “Accessible Pedestrian Signals.”
- 01-1 U-TURN SIGNAL HEADS INDICATOR
Caltrans will develop appropriate standards to ensure visibility and make the U-turn signal head indicator an official traffic control device by inclusion in the Caltrans Traffic manual.
- 01-6 SUPPLEMENT SIGNS ON CHANNELIZERS
Caltrans will work with the Committee on this item.
- 00-4 USE OF RAISED PAVEMENT MARKERS IN TRANSVERSE PATTERN
Caltrans will take appropriate action on the recommendation made by the Committee.
- 01-5 ACCESSIBLE PEDESTRIAN SIGNALS
Caltrans will take appropriate action to adopt the MUTCD verbiage into the Traffic Manual.
- 02-3 RIGHT EDGELINE
Caltrans will take appropriate action on the recommendation made by the Committee

MISCELLANEOUS

Ray Mellen representing Auto Club Southern California and Wayne Tanda representing League of California Cities resigned from the CTCDC due to the change in their profession. Richard Backus and Ed von Borstel replaced them respectively. Captain Sal Segura is the new CTCDC member, representing CHP, replacing Captain Ike Iketani.

CTCDC Agenda, Minutes, Annual Reports, and other information is available on the Internet at " <http://www.dot.ca.gov/hq/traffops/signtech/newtech/>" under the Office of Signs and Delineation web page.

Additional information regarding the minutes of the CTCDC meetings held during 2002 may be obtained upon request from the Secretary or any member of the California Traffic Control Devices Committee.

SIGN SPECIFICATIONS

All additions, revisions and deletions of approved sign specifications made by Caltrans during 2002, will be distributed separately.

As provided in California Vehicle Code Sections 21400 and 21401, a list of new and revised specification sheet for signs used on streets and highways in California is available from the Caltrans Publications Unit, 1900 Royal Oaks Drive, Sacramento, CA 95815, phone (916) 445-3520.

Respectfully submitted by Devinder Singh, Secretary, CTCDC